



Technical Assignment of Škoda Auto a.s. Part I – 07 FMEA

Contents

1. FMEA (Failure Modes Effect Analysis)	2
1.1 Design FMEA	2
1.2 Process FMEA	2

Abbreviations (see Term Definition in part I-00 Structure of Assignment Conditions)

Change History

Status	Date	Description
1.0	1 Oct 2016	New wording



1. FMEA (Failure Modes Effect Analysis)

Final FMEA for the product, standalone design FMEA, preliminary system FMEA and standalone process FMEA have to be written up and presented to the ordering party for approval along with the presentation of the final performance background documentation.

Goals related to product quality and process, availability, concept of quality and control specified by the ordering party in the technical assignment have to be taken into the account.

When processing the FMEA, the “poka yoke” principle must be considered or secured regarding things that could be “missing”, “incorrect” or “incomplete”, both in case of equipment functionality and relevant operation and servicing processes.

All FMEA analyses have to be created by the supplier with regards to the requirements of the ordering party (and after agreeing with them) and provided in an electronic format. Type, quantity and format of the electronic data, as well as a degree of specification will be specified by the ordering party (e.g. in the part III of the project-specific technical assignment). In case of formal errors or insufficient system/measure analysis, the supplier is obliged to re-work the FMEA at their own expense and re-submit to the ordering party.

The supplier is unconditionally obliged to proceed with the existing FMEAs (see the appended background documentation) implemented before the technical assignment was created and to have them approved by the ordering party. The ordering party reserves the right to view unfinished FMEAs, as well as analyses kept by the supplier throughout the entire time of usage of the purchased delivery volume. The FMEA analyses that remain at the supplier have to be archived for 15 year and presented to the ordering party in case of a damage event related to product defect responsibility.

1.1 Design FMEA

The supplier is obliged to work the FMEA along with the design and submit it to the ordering party during design negotiations unless agreed otherwise.

It must be apparent based on the FMEA that the design supports the process progression in a suitable way and highlights its advantages/disadvantages compared to other alternatives.

FMEA must also precisely define possible occurring defects (design part failure, danger for the operator etc.) and suitable means of rectification.

The consequence of the error “Device Stop” must always be backed by the corresponding time stamp (in minutes). The ordering party reserves the right to request that the supplier keep demonstrable records about this. These records must also include interfaces to adjacent devices and transportation systems.

1.2 Process FMEA

The process FMEA must be created and approved with the specialized project supervisor of the ordering party and/or their specialized department for all processes that are not new, critical or requested additionally.

The FMEA must clearly show the process progression in a suitable way and highlight its advantages/disadvantages compared to other alternatives. Additionally, it must be pointed out how the process changes in case of discrepancies (incorrect operation, defective design part, equipment malfunction, etc.). The process FMEA must also highlight which process parameters are specified (within the framework of specified tolerances) for products marked as “i.O. = in order”.

The FMEA analysis must account for the interface to adjacent processes or procedures. Process FMEA corresponding to the acceptance volume must be submitted to the ordering party prior to acceptances during the project.